



Pace Analytical Services, LLC  
1700 Elm Street - Suite 200  
Minneapolis, MN 55414  
(612)607-1700

July 11, 2018

Mort Schmidt  
Cox-Colvin & Associates  
7750 Corporate Blvd.  
Plain City, OH 43064

RE: Project: AK Steel Middletown, Fenceline  
Pace Project No.: 10438289

Dear Mort Schmidt:

Enclosed are the analytical results for sample(s) received by the laboratory on July 05, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

*Carolynne Trout*

Carolynne Trout  
carolynne.trout@pacelabs.com  
1(612)607-6351  
Project Manager

Enclosures

cc: Lab Info, Cox-Colvin & Associates  
Kathy Sarver, Cox-Colvin & Associates  
Henry Stahl, Cox-Colvin & Associates



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC

1700 Elm Street - Suite 200

Minneapolis, MN 55414

(612)607-1700

## CERTIFICATIONS

Project: AK Steel Middletown, Fenceline

Pace Project No.: 10438289

### Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485

A2LA Certification #: 2926.01

Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064

Arizona Certification #: AZ0014

Arkansas DW Certification #: MN00064

Arkansas VVW Certification #: 88-0680

California Certification #: 2929

CNMI Saipan Certification #: MP0003

Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-053-137

Florida Certification #: E87605

Georgia Certification #: 959

Guam EPA Certification #: MN00064

Hawaii Certification #: MN00064

Idaho Certification #: MN00064

Illinois Certification #: 200011

Indiana Certification #: C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky DW Certification #: 90062

Kentucky VVW Certification #: 90062

Louisiana DEQ Certification #: 03086

Louisiana DW Certification #: MN00064

Maine Certification #: MN00064

Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240

Mississippi Certification #: MN00064

Montana Certification #: CERT0092

Nebraska Certification #: NE-OS-18-06

Nevada Certification #: MN00064

New Hampshire Certification #: 2081

New Jersey Certification #: MN002

New York Certification #: 11647

North Carolina DW Certification #: 27700

North Carolina VVW Certification #: 530

North Dakota Certification #: R-036

Ohio DW Certification #: 41244

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001

Oregon Secondary Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification #: MN00064

South Carolina Certification #: 74003001

Tennessee Certification #: TN02818

Texas Certification #: T104704192

Utah Certification #: MN00064

Virginia Certification #: 460163

Washington Certification #: C486

West Virginia DW Certification #: 9952 C

West Virginia DEP Certification #: 382

Wisconsin Certification #: 999407970

Wyoming UST Certification #: 2926.01 via A2LA

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC  
 1700 Elm Street - Suite 200  
 Minneapolis, MN 55414  
 (612)607-1700

## SAMPLE SUMMARY

Project: AK Steel Middletown, Fenceline  
 Pace Project No.: 10438289

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10438289001	AKAA-01	Air	06/30/18 10:19	07/05/18 08:40
10438289002	AKAA-01 cert #1768	Air	06/30/18 10:19	07/05/18 08:40
10438289003	AKAA-02	Air	06/30/18 10:28	07/05/18 08:40
10438289004	AKAA-02 cert #1481	Air	06/30/18 10:28	07/05/18 08:40
10438289005	AKAA-03	Air	06/30/18 10:00	07/05/18 08:40
10438289006	AKAA-03 cert #2689	Air	06/30/18 10:00	07/05/18 08:40
10438289007	AKAA-01	Air	07/01/18 09:20	07/05/18 08:40
10438289008	AKAA-01 cert #2390	Air	07/01/18 09:20	07/05/18 08:40
10438289009	AKAA-02	Air	07/01/18 09:27	07/05/18 08:40
10438289010	AKAA-02 cert #2029	Air	07/01/18 09:27	07/05/18 08:40
10438289011	AKAA-03	Air	07/01/18 09:04	07/05/18 08:40
10438289012	AKAA-03 cert #1267	Air	07/01/18 09:04	07/05/18 08:40
10438289013	AKAA-01	Air	07/02/18 09:45	07/05/18 08:40
10438289014	AKAA-01 cert #1281	Air	07/02/18 09:45	07/05/18 08:40
10438289015	AKAA-02	Air	07/02/18 10:55	07/05/18 08:40
10438289016	AKAA-02 cert #2811	Air	07/02/18 10:55	07/05/18 08:40
10438289017	Unused Can #1255	Air		07/05/18 08:40

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC

1700 Elm Street - Suite 200

Minneapolis, MN 55414

(612)607-1700

## SAMPLE ANALYTE COUNT

Project: AK Steel Middletown, Fenceline

Pace Project No.: 10438289

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10438289001	AKAA-01	TO-15	CH1	1	PASI-M
10438289002	AKAA-01 cert #1768	TO-15	AFV	1	PASI-M
10438289003	AKAA-02	TO-15	MJL	1	PASI-M
10438289004	AKAA-02 cert #1481	TO-15	NCK	1	PASI-M
10438289005	AKAA-03	TO-15	MJL	1	PASI-M
10438289006	AKAA-03 cert #2689	TO-15	NCK	1	PASI-M
10438289007	AKAA-01	TO-15	MJL	1	PASI-M
10438289008	AKAA-01 cert #2390	TO-15	NCK	1	PASI-M
10438289009	AKAA-02	TO-15	MJL	1	PASI-M
10438289010	AKAA-02 cert #2029	TO-15	CH1	1	PASI-M
10438289011	AKAA-03	TO-15	MJL	1	PASI-M
10438289012	AKAA-03 cert #1267	TO-15	NCK	1	PASI-M
10438289013	AKAA-01	TO-15	MJL	1	PASI-M
10438289014	AKAA-01 cert #1281	TO-15	MJL	1	PASI-M
10438289015	AKAA-02	TO-15	MJL	1	PASI-M
10438289016	AKAA-02 cert #2811	TO-15	NCK	1	PASI-M

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC

1700 Elm Street - Suite 200

Minneapolis, MN 55414

(612)607-1700

## ANALYTICAL RESULTS

Project: AK Steel Middletown, Fenceline

Pace Project No.: 10438289

Sample: AKAA-01		Lab ID: 10438289001		Collected: 06/30/18 10:19		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.48	1.49		07/06/18 13:31	71-43-2		
Sample: AKAA-01 cert #1768		Lab ID: 10438289002		Collected: 06/30/18 10:19		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
Individual Can Certification		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.32	1		06/13/18 00:54	71-43-2		
Sample: AKAA-02		Lab ID: 10438289003		Collected: 06/30/18 10:28		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Benzene	14.0	ug/m3	0.47	1.46		07/06/18 14:07	71-43-2		
Sample: AKAA-02 cert #1481		Lab ID: 10438289004		Collected: 06/30/18 10:28		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
Individual Can Certification		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.32	1		06/12/18 20:40	71-43-2		
Sample: AKAA-03		Lab ID: 10438289005		Collected: 06/30/18 10:00		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Benzene	0.56	ug/m3	0.48	1.49		07/06/18 14:43	71-43-2		
Sample: AKAA-03 cert #2689		Lab ID: 10438289006		Collected: 06/30/18 10:00		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
Individual Can Certification		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.32	1		06/12/18 21:14	71-43-2		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC

1700 Elm Street - Suite 200

Minneapolis, MN 55414

(612)607-1700

## ANALYTICAL RESULTS

Project: AK Steel Middletown, Fenceline

Pace Project No.: 10438289

<b>Sample: AKAA-01</b>		<b>Lab ID: 10438289007</b>	Collected: 07/01/18 09:20		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15						
Benzene	ND	ug/m3	0.51	1.58		07/06/18 15:18	71-43-2	
<b>Sample: AKAA-01 cert #2390</b>		<b>Lab ID: 10438289008</b>	Collected: 07/01/18 09:20		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Individual Can Certification</b>		Analytical Method: TO-15						
Benzene	ND	ug/m3	0.32	1		06/10/18 18:01	71-43-2	
<b>Sample: AKAA-02</b>		<b>Lab ID: 10438289009</b>	Collected: 07/01/18 09:27		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15						
Benzene	35.1	ug/m3	0.52	1.61		07/06/18 15:54	71-43-2	
<b>Sample: AKAA-02 cert #2029</b>		<b>Lab ID: 10438289010</b>	Collected: 07/01/18 09:27		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Individual Can Certification</b>		Analytical Method: TO-15						
Benzene	ND	ug/m3	0.32	1		06/14/18 11:01	71-43-2	
<b>Sample: AKAA-03</b>		<b>Lab ID: 10438289011</b>	Collected: 07/01/18 09:04		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR</b>		Analytical Method: TO-15						
Benzene	0.56	ug/m3	0.50	1.55		07/06/18 16:29	71-43-2	
<b>Sample: AKAA-03 cert #1267</b>		<b>Lab ID: 10438289012</b>	Collected: 07/01/18 09:04		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Individual Can Certification</b>		Analytical Method: TO-15						
Benzene	ND	ug/m3	0.32	1		06/12/18 18:23	71-43-2	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC  
1700 Elm Street - Suite 200  
Minneapolis, MN 55414  
(612)607-1700

## ANALYTICAL RESULTS

Project: AK Steel Middletown, Fenceline  
Pace Project No.: 10438289

Sample: AKAA-01		Lab ID: 10438289013		Collected: 07/02/18 09:45		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.51	1.58		07/06/18 17:41	71-43-2		

Sample: AKAA-01 cert #1281		Lab ID: 10438289014		Collected: 07/02/18 09:45		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
Individual Can Certification		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.32	1		04/03/18 03:14	71-43-2		

Sample: AKAA-02		Lab ID: 10438289015		Collected: 07/02/18 10:55		Received: 07/05/18 08:40		Matrix: Air	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15							
Benzene		6.5	ug/m3	0.52	1.61		07/06/18 18:16	71-43-2	

Sample: AKAA-02 cert #2811		Lab ID: 10438289016		Collected: 07/02/18 10:55		Received: 07/05/18 08:40		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
Individual Can Certification		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.32	1		06/12/18 16:41	71-43-2		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC

1700 Elm Street - Suite 200

Minneapolis, MN 55414

(612)607-1700

### QUALITY CONTROL DATA

Project: AK Steel Middletown, Fenceline

Pace Project No.: 10438289

QC Batch: 548890 Analysis Method: TO-15  
 QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level  
 Associated Lab Samples: 10438289001, 10438289003, 10438289005, 10438289007, 10438289009, 10438289011, 10438289013, 10438289015

METHOD BLANK: 2983825 Matrix: Air  
 Associated Lab Samples: 10438289001, 10438289003, 10438289005, 10438289007, 10438289009, 10438289011, 10438289013, 10438289015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/m3	ND	0.32	07/06/18 11:04	

LABORATORY CONTROL SAMPLE: 2983826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/m3	32.5	29.4	90	70-134	

SAMPLE DUPLICATE: 2984940

Parameter	Units	10437328028 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/m3	<0.47	ND		25	

SAMPLE DUPLICATE: 2984941

Parameter	Units	10438289011 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/m3	0.56	0.56	1	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.





Pace Analytical Services, LLC

1700 Elm Street - Suite 200

Minneapolis, MN 55414

(612)607-1700

## QUALIFIERS

Project: AK Steel Middletown, Fenceline

Pace Project No.: 10438289

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC

1700 Elm Street - Suite 200

Minneapolis, MN 55414

(612)607-1700

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AK Steel Middletown, Fenceline

Pace Project No.: 10438289

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10438289001	AKAA-01	TO-15	548890		
10438289003	AKAA-02	TO-15	548890		
10438289005	AKAA-03	TO-15	548890		
10438289007	AKAA-01	TO-15	548890		
10438289009	AKAA-02	TO-15	548890		
10438289011	AKAA-03	TO-15	548890		
10438289013	AKAA-01	TO-15	548890		
10438289015	AKAA-02	TO-15	548890		
10438289002	AKAA-01 cert #1768	TO-15	549131		
10438289004	AKAA-02 cert #1481	TO-15	549131		
10438289006	AKAA-03 cert #2689	TO-15	549131		
10438289008	AKAA-01 cert #2390	TO-15	549131		
10438289010	AKAA-02 cert #2029	TO-15	549131		
10438289012	AKAA-03 cert #1267	TO-15	549131		
10438289014	AKAA-01 cert #1281	TO-15	549131		
10438289016	AKAA-02 cert #2811	TO-15	549131		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## Air Sample Chain of Custody

## Client Contact Information

Project Manager: Mort Schmidt  
 Phone: 614-526-2040  
 Email: Mort\_Schmidt@CoxColvin.com  
 7750 Corporate Blvd.  
 Plain City, Ohio 43064  
 Laboratory: Pace Minneapolis  
 Phone: 614-526-2040  
 Lab Contact: Carolynne Trout  
 Fax: 614-526-2041  
 Lab Quote: 00049208

## Send Information

LabInfo@CoxColvin.com  
 Kathy\_Sarver@CoxColvin.com  
 Mort\_Schmidt@CoxColvin.com  
 Henry\_Stahl@CoxColvin.com

## Turn Around Time: 5-Day

POH (None)

Carrier: Pace Columbus Service Center

Project Name: AK Steel Middletown, Fenceline Benzene

Site/Location: Middletown, Ohio

Samplers: EC, RM, MS

Sample	Sample Date	Start Time	End Time	Start Vacuum (inHg)	End Vacuum (inHg)	Controller ID	Canister ID	PID Reading (ppm)
AKAA-01	6/30/2018	10:40	10:19	30+	1.9	352	1768	NA
AKAA-02	6/30/2018	10:46	10:28	28.0	3.0	0137	1481	NA
AKAA-03	6/30/2018	10:15	10:00	30+	4.0	0111	2689	NA
AKAA-01	7/1/2018	10:21	9:20	30+	4.0	1456	2390	NA
AKAA-02	7/1/2018	10:30	9:27	30+	4.5	1381	2029	NA
AKAA-03	7/1/2018	10:00	9:04	29.5	4.0	1415	1267	NA
AKAA-01	7/2/2018	10:18	9:45	30+	3.0	1252	1281	NA
AKAA-02	7/2/2018	10:25	10:55	30+	2.0	0512	2811	NA
AKAA-03	7/2/2018	9:55	9:40	29.0	2.0	0084	2190	NA

## Sampler Comments

Temperature (Fahrenheit)	71	73	73	74	74	76
Pressure (inHg)	29.40	29.40	29.40	29.30	29.30	29.40
Sample (End) Date	6/30/2018	7/1/2018	7/1/2018	7/2/2018	7/2/2018	7/2/2018

## Laboratory Notes

Relinquished by Name, Affiliation

Date

Time

Accepted by (Name, Affiliation)

Date

Time

Sample Condition

Relinquished by Name, Affiliation

Date


Time

Accepted by (Name, Affiliation)

Date

Time

Sample Condition

	Document Name: <b>Air Sample Condition Upon Receipt</b>	Document Revised: 02May2018
	Document No.: <b>F-MN-A-106-rev.15</b>	Page 1 of 1
	Issuing Authority: Pace Minnesota Quality Office	

**Air Sample Condition Upon Receipt**

Client Name:

Cox - Colvin

Project #:

**W0# : 10438289**
 Courier: ☒ Fed Ex ☐ UPS ☐ Speedee ☐ Client  
☐ Commercial ☐ Pace ☐ Other:

PM: CT1

Due Date: 07/12/18

CLIENT: Cox Colvin

Tracking Number: 4164 6671 2464, 2453, 2442Custody Seal on Cooler/Box Present? ☐ Yes ☒ NoSeals Intact? ☐ Yes ☒ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other:Temp Blank rec: ☐ Yes ☒ No

Temp. (TO17 and TO13 samples only) (°C):

Corrected Temp (°C):

Thermom. Used:

☐ G87A9170600254☒ G87A9155180842

Temp should be above freezing to 6°C

Correction Factor:

Date &amp; Initials of Person Examining Contents:

RG 7/5/18Type of ice Received ☐ Blue ☐ Wet ☒ None

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. <u>AKAA-03 can #2192 Did not arrive</u>
Media: <u>Air Can</u> Airbag Filter TDT Passive		11. Individually Certified Cans <u>Y</u> <u>N</u> (list which samples)
Is sufficient information available to reconcile samples to the COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.

Samples Received: RG 7/5/18 19 B Cans

Pressure Gauge # 10AIR26

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
AKAA-01 6/30			-3	+5	AKAA-03 7/2				+5
" 02 "			-2.5	"	<u>unused</u>	1255	1449	-30	"
" 03 "			-3	"					
AKAA-001 7/1			-4.5	"					
" 02 "			-5	"					
" 03 "			-4	"					
AKAA 01 7/2			-4.5	"					
02 "			-5	"					

**CLIENT NOTIFICATION/RESOLUTION**Field Data Required? ☐ Yes ☐ No

Person Contacted:

Date/Time:

Comments/Resolution:

Project Manager Review:

Catalyne Hunt

Date: 7/5/18

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin  
 Phone: 614-526-2040

Lab Project Number: 10438289

Project Name: AK Steel Middletown, Fenceline

Lab Sample No: 10438289001

ProjSampleNum: 10438289001

Date Collected: 06/30/18 10:19

Client Sample ID: AKAA-01

Matrix: Air

Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.15	1.49	07/06/18 13:31 CH1	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 1



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin  
 Phone: 614-526-2040

Lab Project Number: 10438289

Project Name: AK Steel Middletown, Fenceline

Lab Sample No: 10438289002

ProjSampleNum: 10438289002

Date Collected: 06/30/18 10:19

Client Sample ID: AKAA-01 cert #1768

Matrix: Air

Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	06/13/18 0:54 AFV	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 2



*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289003      ProjSampleNum: 10438289003      Date Collected: 06/30/18 10:28  
 Client Sample ID: AKAA-02      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	4.3	ppbv	0.14	1.46	07/06/18 14:07 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 3



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289004      ProjSampleNum: 10438289004      Date Collected: 06/30/18 10:28  
 Client Sample ID: AKAA-02 cert #1481      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	06/12/18 20:40 NCK	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 4





*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin  
 Phone: 614-526-2040

Lab Project Number: 10438289

Project Name: AK Steel Middletown, Fenceline

Lab Sample No: 10438289005

ProjSampleNum: 10438289005

Date Collected: 06/30/18 10:00

Client Sample ID: AKAA-03

Matrix: Air

Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	0.17	ppbv	0.15	1.49	07/06/18 14:43 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 5



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289006      ProjSampleNum: 10438289006      Date Collected: 06/30/18 10:00  
 Client Sample ID: AKAA-03 cert #2689      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	06/12/18 21:14 NCK	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 6



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin  
 Phone: 614-526-2040

Lab Project Number: 10438289

Project Name: AK Steel Middletown, Fenceline

Lab Sample No: 10438289007

ProjSampleNum: 10438289007

Date Collected: 07/01/18 9:20

Client Sample ID: AKAA-01

Matrix: Air

Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.16	1.58	07/06/18 15:18 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 7



*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289008      ProjSampleNum: 10438289008      Date Collected: 07/01/18 9:20  
 Client Sample ID: AKAA-01 cert #2390      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	06/10/18 18:01 NCK	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 8



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289009      ProjSampleNum: 10438289009      Date Collected: 07/01/18 9:27  
 Client Sample ID: AKAA-02      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	10.8	ppbv	0.16	1.61	07/06/18 15:54 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 9



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289010      ProjSampleNum: 10438289010      Date Collected: 07/01/18 9:27  
 Client Sample ID: AKAA-02 cert #2029      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	06/14/18 11:01 CH1	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 10



*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin  
 Phone: 614-526-2040

Lab Project Number: 10438289

Project Name: AK Steel Middletown, Fenceline

Lab Sample No: 10438289011  
 Client Sample ID: AKAA-03

ProjSampleNum: 10438289011  
 Matrix: Air

Date Collected: 07/01/18 9:04  
 Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	0.17	ppbv	0.15	1.55	07/06/18 16:29 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 11



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289012      ProjSampleNum: 10438289012      Date Collected: 07/01/18 9:04  
 Client Sample ID: AKAA-03 cert #1267      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	06/12/18 18:23 NCK	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 12





*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin Lab Project Number: 10438289  
 Phone: 614-526-2040 Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289013 ProjSampleNum: 10438289013 Date Collected: 07/02/18 9:45  
 Client Sample ID: AKAA-01 Matrix: Air Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.16	1.58	07/06/18 17:41 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 13



*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin Lab Project Number: 10438289  
 Phone: 614-526-2040 Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289014 ProjSampleNum: 10438289014 Date Collected: 07/02/18 9:45  
 Client Sample ID: AKAA-01 cert #1281 Matrix: Air Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	04/03/18 3:14 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 14



*Pace Analytical Services, LLC*  
**1700 Elm Street, Suite 200**  
**Minneapolis, MN 55414**  
**Phone: 612.607.1700**  
**Fax: 612.607.6444**

### ANALYTICAL RESULTS

Client: Cox Colvin      Lab Project Number: 10438289  
 Phone: 614-526-2040      Project Name: AK Steel Middletown, Fenceline  
 Lab Sample No: 10438289015      ProjSampleNum: 10438289015      Date Collected: 07/02/18 10:55  
 Client Sample ID: AKAA-02      Matrix: Air      Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	2	ppbv	0.16	1.61	07/06/18 18:16 MJL	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 15



*Pace Analytical Services, LLC*  
 1700 Elm Street, Suite 200  
 Minneapolis, MN 55414  
 Phone: 612.607.1700  
 Fax: 612.607.6444

### ANALYTICAL RESULTS

Client: Cox Colvin  
 Phone: 614-526-2040

Lab Project Number: 10438289

Project Name: AK Steel Middletown, Fenceline

Lab Sample No: 10438289016

ProjSampleNum: 10438289016

Date Collected: 07/02/18 10:55

Client Sample ID: AKAA-02 cert #2811

Matrix: Air

Date Received: 07/05/18 8:40

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
<b>Air</b>							
TO-15							
Benzene	ND	ppbv	0.099	1	06/12/18 16:41 NCK	71-43-2	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

### SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 16



*Pace Analytical Services, LLC*  
*1700 Elm Street, Suite 200*  
*Minneapolis, MN 55414*  
*Phone: 612.607.1700*  
*Fax: 612.607.6444*

## ANALYTICAL RESULTS

Client: Cox Colvin  
Phone: 614-526-2040

Lab Project Number: 10438289  
Project Name: AK Steel Middletown, Fenceline

---

## PARAMETER FOOTNOTES

## SUPPLEMENTAL REPORT

Units Conversion Request

Date: 7/11/2018

Page 17